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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,700	01/23/2004	Leonard Felix	SLA1478	7663
<div>7590 10/03/2007</div> <div>Gerald W. Maliszewski P.O. Box 270829 San Diego, CA 92198-2829</div>				
			EXAMINER MCLEAN, NEIL R	
			ART UNIT 2625	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/763,700	Applicant(s) FELIX ET AL.	
	Examiner Neil R. McLean	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/23/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because drawings 5-6 and 13 are not legible. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-14, and 16-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishikawa et al. (6,934,046).

Regarding Claim 1:

Nishikawa et al. discloses the method for de-spooler job joining (Column 1, lines 9-14), the method comprising:

at a client device (e.g., Host 3000 in Figure 3; Column 5, lines 61-66), despooling (Despooler 305 in Figure 3; Column 8, lines 40-46) a plurality of print jobs; joining the plurality of print jobs into a single joined print job (Column 8, lines 59-67) and, rendering (Column 9, lines 51-52) the joined print job as a single continuous print job.

Regarding Claim 3:

Nishikawa et al. discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes joining the plurality of print jobs at the client device (Column 8, lines 59-67); and, the method further comprising: sending the joined print job to an imaging device (Column 7, lines 32-36).

Regarding Claim 4:

Nishikawa et al. discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes: concatenating the plurality of print jobs (Column 3, lines 24-27); and creating a single spool file with multiple raster image processes (RIPs) (Column 21, lines 48-53).

Regarding Claim 5:

Nishikawa et al. discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

generating a RIP for each print job (Column 8, lines 14-18), with RIP end/start instructions (Column 8, lines 22-24);

removing the RIP end/start instructions (Column 8, lines 18-22);

concatenating the plurality of RIPs (Column 8, lines 59-63); and,

creating a single spool file with a single RIP (Column 8, lines 64-67).

Regarding Claim 6:

Nishikawa et al. discloses the method of claim 5 wherein generating a RIP for each print job, with RIP end/start instructions, includes generating instructions (Column 8, lines 47-53) selected from the group including universal exit language (UEL), printer reset, @PJM header sequence, and @PJM EOJ.

Regarding Claim 7:

Nishikawa et al. discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

converting each print job into an image format file (e.g., PDL; Column 7, lines 29-32); and,

merging the image format files into a single RIP (Column 21, lines 24-27).

Regarding Claim 8:

Nishikawa et al. discloses the method of claim 7 wherein converting each print job into an image format file includes converting each print job into an image format file selected from the group including TIFF, JPEG, Windows bitmap, and PDF format files (Column 8, lines 16-18).

Regarding Claim 9:

Nishikawa et al. discloses the method of claim 1 further comprising: prior to joining the plurality of print jobs, accepts static control selection commands (e.g., Figure 8); and,

wherein joining the plurality of print jobs into a single joined print job includes joining the jobs in response to the selected static controls (See Figures 27 and 30).

Regarding Claim 10:

Nishikawa et al. discloses the method of claim 9 wherein accepting static control selection commands includes selecting a control from the group including print job format, print job document type, threshold printing instructions, and printing delay instructions (e.g., Figure 22).

Regarding Claim 11:

Nishikawa et al. discloses the method of claim 1 further comprising: accepting dynamic control selection commands;

analyzing dynamic conditions at run-time (Column 22, lines 21-32); and,

wherein joining the plurality of print jobs into a single joined print job includes joining the jobs in response to the dynamic conditions and the selected dynamic controls (Column 22, lines 33-35).

Regarding Claim 12:

Nishikawa et al. discloses the method of claim 11 wherein accepting dynamic control selection commands includes selecting controls from the group including the number of pending print jobs (e.g., Figure 30 shows example of a screen for editing the composed job), a merger performance analysis, inter-RIP conflicts analysis, and post-merger inter-RIP conflict resolution.

Regarding Claim 13:

Nishikawa et al. discloses the method of claim 1 wherein joining the plurality of print jobs into a single joined print job includes:

converting each print job into a raster format file specific to an imaging device's rendering engine(e.g., PDL; Column 7, lines 29-32); and,

merging the raster format files into a single RIP (Column 21, lines 24-27).

Regarding Claim 14:

Nishikawa et al. discloses a system for de-spooler job joining (Column 1, lines 9-14), the system comprising:

a merger unit (e.g., Host 3000 in Figure 3; Column 5, lines 61-66) having an interface to receive a plurality of despoiled print jobs (Despooler 305 in Figure 3; Column 8, lines 40-46), the merger unit joining the plurality of print jobs into a single joined print job (Column 8, lines 59-67) supplied at an interface (two way interface 121 in Figure 1); and,

an imaging device print controller (PRTC in Figure 1) having an interface (two way interface 121 in Figure 1) to accept the joined print job and an interface to supply a document rendered as a single continuous print job (Column 9, lines 51-52).

Regarding Claim 16:

Nishikawa et al. discloses the system of claim 14 further comprising:

a client device (e.g., Host 3000 in Figure 1 and 2) including:

a spooler (spooler 302 in Figure 3) with an interface to receive print jobs and an interface (121 in Figure 1) to supply the received print jobs;

a de-spooler (305 in Figure 3) having an interface to receive the print jobs from the spooler and an interface to supply despoiled print jobs to the merger unit;

wherein the merger unit (e.g., Spool File Manager 304 in Figure 3) is logically connected with the client device, the merger unit having a network-connected interface (121 in Figure 1) to supply the joined print job to the imaging device print controller; and,

wherein the imaging device print controller (PRTC 108 in Figure 1) has a network-connected interface (121 in Figure 1) to receive the joined print job from the client device merger unit.

Regarding Claim 17:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit joins the plurality of print jobs into a single joined print job by concatenating the plurality of print jobs (Column 3, lines 24-27), and creating a single spool file with multiple raster image processes (RIPs) (Column 21, lines 48-53).

Regarding Claim 18:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit joins the plurality of print jobs into a single joined print job by:

generating a RIP for each print job (Column 8, lines 14-18), with RIP end/start instructions (Column 8, lines 22-24);

removing the RIP end/start instructions (Column 8, lines 18-22);

concatenating the plurality of RIPs (Column 8, lines 59-63); and,

creating a single spool file with a single RIP (Column 8, lines 64-67).

Regarding Claim 19:

Nishikawa et al. discloses the system of claim 18 wherein the merger unit generates RIP end/start instructions (Column 8, lines 47-53) selected from the group including universal exit language (UEL), printer reset, @PJL header sequence, and @PJL EOJ.

Regarding Claim 20:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit joins the plurality of print jobs into a single joined print job by converting each print job into an image format file (e.g., PDL; Column 7, lines 29-32), and merging the image format files into a single RIP (Column 21, lines 24-27).

Regarding Claim 21:

Nishikawa et al. discloses the system of claim 20 wherein the merger unit converts each print job into an image format file selected from the group including TIFF, JPEG, Windows bitmap, and PDF format files (Column 8, lines 16-18).

Regarding Claim 22:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit has a static condition user interface (UI) for selecting static controls prior to joining the plurality of print jobs (e.g., Figure 8), the merger unit joining the plurality of print jobs into a single joined print job in response to the selected static controls (See Figures 27 and 30).

Regarding Claim 23:

Nishikawa et al. discloses the system of claim 22 wherein the merger unit is responsive to static controls selected from the group including print job format, print job document type, threshold printing instructions, and printing delay instructions (e.g.,

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Figure 22).

Regarding Claim 24:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit has a dynamic condition UI for selecting dynamic controls, the merger unit analyzing dynamic conditions at run-time (Column 22, lines 21-32) and joining the plurality of print jobs into a single joined print job in response to the dynamic conditions and the selected dynamic controls (Column 22, lines 33-35).

Regarding Claim 25:

Nishikawa et al. discloses the system of claim 24 wherein the merger unit accepts dynamic controls selected from the group including the number of pending print jobs (e.g., Figure 30 shows example of a screen for editing the composed job), a merger performance analysis, inter-RIP conflicts analysis, and post-merger inter-RIP conflict resolution.

Regarding Claim 26:

Nishikawa et al. discloses the system of claim 14 further comprising:
an imaging device rendering engine (e.g., print engine 117 in Figure 1) having an interface (e.g., input unit 118 in Figure 1) to accept the rendered document from the print controller (PRTC 108 in Figure 1) and an interface (two way interface 121 Figure 1) to supply documents in a format selected from the group including paper media, archive

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documents, and scanned image data.

Regarding Claim 27:

Nishikawa et al. discloses the system of claim 26 wherein the merger unit joins the plurality of print jobs into a single joined print job by converting each print job into a raster format file which is specific to the imaging device's rendering engine (e.g., PDL; Column 7, lines 29-32), and merging the raster format files into a single RIP (Column 21, lines 24-27).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishikawa et al. in view of Reilly (US 6,502,147).

Regarding Claim 2:

Nishikawa et al. discloses the method of claim 1 further comprising:
receiving the plurality of print jobs at an imaging device (Column 8, lines 54-58);

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Nishikawa et al. does not expressly disclose wherein the server computer 4 of Figure 4 is located in the printer.

Reilly, in the same field of endeavor of network printing systems discloses wherein the print server resides within the printer (Column 1, lines 43-54).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included the host computer 3000 of Figure 3 in the printer of Nishikawa et al.

The suggestion/motivation for combining the printer and print server is to reduce the cost (Column 2, lines 40-45; Reilly).

Therefore, it would have been obvious to combine the network interface of Reilly with the network printing system of Nishikawa et al. to obtain the invention as specified in Claim 2.

Regarding Claim 15:

Nishikawa et al. discloses the system of claim 14 wherein the merger unit is logically connected with the imaging device (e.g., Figure 3); and,

the system further comprising:

a spooler (302 in Figure 3) having a network-connected interface (e.g., Figure 2) to receive print jobs and an interface to supply the received print jobs (Column 5, lines 53-60); and,

a despooler (e.g., 305 in Figure 3) having an interface to receive the print jobs from the spooler and an interface to supply (121 in Figure 1) despoiled print jobs to the merger unit.

Nishikawa et al. does not expressly disclose wherein the server computer 4 of Figure 4 is located in the printer.

Reilly, in the same field of endeavor of network printing systems discloses wherein the print server resides within the printer (Column 1, lines 43-54).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have included the server computer 4 of Figure 4 in the printer of Takimoto.

The suggestion/motivation for combining the printer and print server is to reduce the cost (Column 2, lines 40-45; Reilly).

Therefore, it would have been obvious to combine the network interface of Reilly with the network printing system of Nishikawa et al. to obtain the invention as specified in Claim 15.

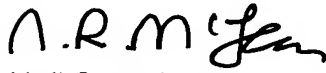
Conclusion

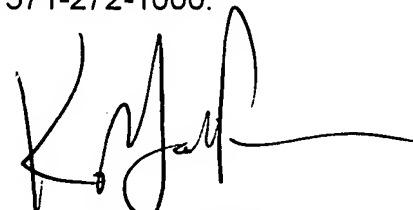
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts et al. (US 6,476,930) discloses a method and apparatus for printing and automatically assembling an electronic document.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. McLean whose telephone number is 571.270.1679. The examiner can normally be reached on Monday through Friday 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on 571.272.7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Neil R. McLean
09/27/2007


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SUPERVISORY PATENT EXAMINER